

# Adabas Cluster Operator Commands

This part of the documentation provides information on the operator commands for ADACOM and for an Adabas cluster nucleus.

This chapter covers the following topics:

- ADACOM Operator Commands
  - Adabas Cluster Nucleus Operator Commands
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## ADACOM Operator Commands

Special ADACOM operator commands exist to display and control the multiprocessing environment. These commands, which are similar to regular Adabas operator commands, are issued to the local ADACOM initialization job.

The ADACOM task used to allocate and monitor the PLXCB and subordinate data structures in common storage (ECSA) terminates after processing the commands given in DDKARTE, if CMDMGR=NO has been specified for all SVC/DBID pairs. If CMDMGR=YES (the default setting) has been specified for one or more SVC/DBID pairs, the ADACOM task stays active and accepts operator commands for displaying and controlling the multiprocessing environment.

This section covers the following topics:

- Commands Issued During ADACOM Initialization
- Commands Issued after ADACOM Initialization
- DIM - Display Images
- DN - Display Active Nuclei
- DUMP - Dump Storage Areas
- SN - Set Nucleus Status

### Commands Issued During ADACOM Initialization

When running the Adabas Cluster Services initialization routine ADACOM, the operator commands described in this section can be specified in one of the following input formats:

```
MODIFY  jobname,command  
F       jobname,command
```

where

jobname	name of the ADACOM job or started task
command	one of the operator commands described in this section

## Commands Issued after ADACOM Initialization

After initialization, any command issued is directed to the last SVC/DBID pair encountered in the input.

```
MODIFY jobname,SVC=svc,DBID=dbid,command
F      jobname,SVC=svc,DBID=dbid,command
```

A command can be given only if the SVC/DBID pair is already active (has been specified before, and not terminated). Otherwise, specify the SVC/DBID pair without a command to activate the SVC/DBID (as shown above), and then issue the command separately (as shown below).

```
MODIFY jobname,SVC=svc,DBID=dbid[,NU=maxusers] [,FORCE=YES],command
F      jobname,SVC=svc,DBID=dbid[,NU=maxusers] [,FORCE=YES],command
```

When you change or add an SVC/DBID set in this manner, the new set becomes the default for all commands issued until the set is changed.

```
MODIFY jobname,SVC=svc,DBID=dbid,command,ADAEND
F      jobname,SVC=svc,DBID=dbid,command,ADAEND
```



### Warning:

**You must specify the SVC and DBID when terminating an SVC/DBID combination. Otherwise, the ADAEND command terminates the entire ADACOM job. The current set default does not apply when using ADAEND.**

Every operator command is directed to the ADACOM job and is echoed with the message

```
PLI060 SVC=svc DBID=dbid OPERATOR COMMAND:xxx
```

### Note:

ADACOM writes global ADACOM messages into the output data set with the DD name COMPRINT. It writes messages pertinent to an individual SVC/DBID combination into the output data set with the DD name 'Pssdddd', where *ss* is the last two digits of the SVC number and *dddd* is the database ID.

## DIM - Display Images

```
DIM [image-name]
```

Use DIM to display the number of commands processed and the number of currently active users for each active nucleus on every image known to the local image.

If the image name is specified, DIM displays the information for the specified image only.

### Sample Output

```
PLI060 SVC=svc DBID=dbid OPERATOR COMMAND:DIM
PLI004 image-name NUCID UP LO RO -#USERS- -#CMNDS- LURA= RULA=
      jobname      00001 Y  Y  N  00000152 00000001
PLI007 image-name NUCID UP LO RO -#USERS- -#CMNDS- LURA= RULA=
      jobname      00002 Y  ** NN 00000089 00000000
```

Nuclei on the local image start open; nuclei on remote images start closed to the local image. The display uses the following indicators:

image-name	the name of the image: in PLI004 displays, this is the local image; in PLI007 displays, this is a remote image
jobname	the job name of a cluster nucleus active on that image
NUCID	the unique cluster nucleus identifier between 1 and 65000
UP	whether (Y or N) the specified nucleus is available for normal processing
LO	whether the specified nucleus is on the local image and open for new users (Y); on the local image and closed for new users (N); or not on the local image (**)
RO	whether the specified local nucleus (PLI0004 message) is closed for new users from remote images (N) or open for new users from all images (G); or whether the specified remote nucleus (PLI007 message) is closed for new users from remote (as seen from that nucleus) images (NN), open for new users from this image (where DIM was issued) but not necessarily other images (LN), or open for new users from all images (NG and LG)
#USERS	the number of users currently assigned to the specified nucleus
#CMNDS	the number of commands currently in progress in the specified nucleus
LURA=	the number of local users currently assigned to a remote image
RULA=	the number of remote users currently assigned to the local image

### DN - Display Active Nuclei

Use DN to display the number of commands processed and the number of currently active users for each active nucleus on the local image only.

### Sample Output

```
PLI060 SVC=svc DBID=dbid OPERATOR COMMAND:DN
PLI004 image-name NUCID UP LO RO -#USERS- -#CMNDS- LURA= RULA=
      jobname      00001 Y  Y  N  00000152 00000001
PLI004 image-name NUCID UP LO RO -#USERS- -#CMNDS- LURA= RULA=
      jobname      00002 Y  Y  N  00000000 00000000
```

Nuclei on the local image start open. The display uses the following indicators:

image-name	the name of the image: in PLI004 displays, this is the local image name
jobname	the job name of the cluster nucleus active on the local image
NUCID	the unique cluster nucleus identifier between 1 and 65000
UP	whether (Y or N) the specified nucleus is available for normal processing
LO	whether the specified local nucleus is open (Y) or closed for new users (N)
RO	whether the specified nucleus is closed for new users from remote images (N) or open for new users from all images (G)
#USERS	the number of users currently assigned to the specified nucleus
#CMNDS	the number of commands currently in progress in the specified nucleus
LURA=	the number of local users currently assigned to a remote image
RULA=	the number of remote users currently assigned to the local image

## DUMP - Dump Storage Areas

The DUMP command displays internal information about various storage areas that Adabas Cluster Services and Adabas Parallel Services use for controlling the communication with the cluster nuclei. Use this command as directed by Software AG Support. Its output might be helpful in the diagnosis of communication-related problems with cluster databases.

```
DUMP stg-area
```

where *stg-area* can be any of the following storage areas: CLUDSP, IDTE, IDTH, IDTHPRFX, PLXCB, PLXMAP, PLXNUC, PLXUSER, or SVC.

## SN - Set Nucleus Status

```
SN {RMTALL | image-name | nucleus-id} {OP | CL}
SN {LCLALL | nucleus-id} {OP | CL} {LCL | GBL}
```

where

RMTALL	is REMOTE ALL: all nuclei on all remote images
OP	is OPEN
CL	is CLOSE
LCLALL	is LOCAL ALL: all nuclei on the local image
LCL	is LOCAL: local users
GBL	is GLOBAL: all sysplex cluster users

The possible options settings for the SN command are described as follows:

<b>Option</b>	<b>Action</b>
RMTALL {OP   CL}	open or close all nuclei on all remote images to the image issuing the command.
image-name {OP   CL}	open or close all nuclei on the specified remote image to the image issuing the command.
nucleus-id {OP   CL}	open or close the specified remote nucleus to the image issuing the command.
LCLALL {OP   CL} LCL	open or close all nuclei on the local image to local users. Information is not broadcast to other images.
nucleus-id {OP   CL} LCL	open or close the specified local nucleus to local users. Information is not broadcast to other images.
LCLALL {OP   CL} GBL	open or close all nuclei on the local image to all sysplex cluster users.
nucleus-id {OP   CL} GBL	open or close the specified local nucleus to all sysplex cluster users.

By default, nuclei start open to local users and closed to remote users.

After the nuclei start, the SN operator commands may be used to exercise some control over the assignment of users to nuclei. For example, in a node with no active local nuclei, it is necessary to open at least one remote nucleus to users from the local node in order to run user programs in that node.

## Adabas Cluster Nucleus Operator Commands

The following console operator commands can be issued against a local Adabas cluster nucleus. In addition, the console operator commands documented in *Adabas Operations* documentation can be issued against any local nucleus.

Command	To ...
CLUFREEUSER	Delete leftover cluster user table elements (UTEs or PLXUSERS) in common storage that are no longer associated with user queue elements (UQEs) in a nucleus
DMEMTB	Display information about active Adabas cluster nuclei
DNFV	Display information about current file use
DPARM	Display Adabas session parameters currently in effect
DPPT	Display information about the nucleus's own PPT block
DTARG	Display the system image currently servicing commands routed using the Entire Net-Work DBID target.
DXCACHE	Display the primary cache-related statistics
DXFILE	Display the cache-related statistics for 1 to 5 files
DXLOCK	Display the lock-related statistics
DXMSG	Display the Adabas Cluster Services messaging performance statistics
DXSTAT	Display all cache- and lock-related statistics
MXCANCEL	Dynamically change the ADARUN MXCANCEL setting
MXCANCELWARN	Dynamically change the ADARUN MXCANCELWARN setting
MXMSG	Dynamically change the ADARUN MXMSG setting
MXMSGWARN	Dynamically change the ADARUN MXMSGWARN setting
MXSTATUS	Dynamically change the ADARUN MXSTATUS setting
MXWTOR	Dynamically change the ADARUN MXWTOR setting
SMFDETAIL	Dynamically select the detail section types in SMF Interval and Termination records
TARGET	Route commands to a specified target.

**Note:**

See the *Adabas Cluster Services Operations* documentation for information about issuing Adabas utility ADADBS OPERCOM commands against the local cluster nucleus, a specified cluster nucleus, or all cluster nuclei.

**CLUFREEUSER Command: Delete Leftover Cluster User Table Elements**

```
CLUFREEUSER=[,TNA= max-time ][,{UID | UIDPREFIX} = userid ][,FORCE][,GLOBAL]
```

**Note:**

The CLUFREEUSER command is only valid in cluster environments. It can be issued against the local nucleus only or, with the GLOBAL option, against all active and inactive nuclei in the cluster.

Use the CLUFREEUSER command to delete leftover cluster user table elements (UTES or PLXUSERS) in common storage that are no longer associated with user queue elements (UQEs) in a nucleus.

**TNA** TNA specifies a decimal number specifying the timeout value in seconds (*max-time*). PLXUSERS that are not used during the time specified may be deleted if other conditions are fulfilled. If TNA= is not specified, PLXUSERS may be deleted without regard to their recent use.

**UID** UID specifies a character string or hexadecimal byte string format user ID (*userid*) as follows:

*ccccccc* where the argument is 1-8 letters, digits, or embedded '-' signs without surrounding apostrophes.

'*ccccccc*' where the argument is 1-8 characters with surrounding apostrophes.

X'*xxxxxxxxxxxxxxxx*' where the argument is an even number of 2-16 hexadecimal digits enclosed by X' '.

A character string must be enclosed in apostrophes if it contains characters other than letter, digits, or embedded '-' signs. If a specified character string is less than eight characters long, it is implicitly padded with blanks. If a specified hexadecimal string is shorter than 16 hexadecimal digits, it is implicitly padded with binary zeros. If the last eight bytes of a user's 28-byte communication ID match a specific user ID or user ID prefix (UIDPRFX parameter), that user's PLXUSER may be deleted if other conditions are fulfilled. If UID is not specified, PLXUSERS may be deleted regardless of their user IDs. "UID" may be abbreviated to "U".

UID and UIDPRFX are mutually exclusive; one or the other, but not both, can be specified.

**UIDPRFX** UIDPRFX accepts the same operands as UID. It operates in the same manner as UID, except that the operand is considered a prefix and there is no implicit padding. If the operand matches the initial bytes of the last eight bytes of the 28-byte communication ID, that PLXUSER may be deleted if other conditions are fulfilled. "UIDPRFX" may be abbreviated to "UP".

UID and UIDPRFX are mutually exclusive; one or the other, but not both, can be specified.

- FORCE** FORCE indicates that leftover PLXUSERS are to be deleted even if the users are due a response code 9 (ADARSP009), subcode 20. If FORCE is not specified, such PLXUSERS are not deleted. Before using the FORCE parameter, ensure that the users owning the PLXUSERS to be deleted will not expect any of their transactions to remain open.
- GLOBAL** GLOBAL indicates that leftover PLXUSERS throughout the Adabas cluster are to be deleted if they are no longer associated with UQEs and are eligible according to the other specified parameters. Additionally and subject to the other rules, leftover PLXUSERS are deleted if their assigned nuclei have terminated since their last use. If GLOBAL is not specified, only PLXUSERS assigned to the local nucleus and used since the nucleus start are eligible for deletion.

## DMEMTB Command: Display Member State Table

The DMEMTB command can be used to display the member state table, which provides information about all of the active nuclei in an Adabas cluster. The information produced by this command may be used by Software AG technical support.

The output produced by the DMEMTB command includes a third flag that indicates whether a system- or message-level XCF status monitoring exception has been encountered and whether a message was issued for the exception.

### Sample Output

```
ADAX61 00226 2009-06-24 16:53:26 Member Status Table
ADAX61 00226 2009-06-24 16:53:26 Other members:      1
ADAX61 00226 2009-06-24 16:53:26 This system:      1
ADAX61 00226 2009-06-24 16:53:26
ADAX61 00226 2009-06-24 16:53:26          NUCID:      2,261
ADAX61 00226 2009-06-24 16:53:26 Internal ID:      2
ADAX61 00226 2009-06-24 16:53:26          System: DA2F
ADAX61 00226 2009-06-24 16:53:26          Job Name: USACHPD1
ADAX61 00226 2009-06-24 16:53:26 Flags 1/2/3: 11/00/00
ADAX61 00226 2009-06-24 16:53:26
ADAX61 00226 2009-06-24 16:53:26          NUCID:      2,262
ADAX61 00226 2009-06-24 16:53:26 Internal ID:      3
ADAX61 00226 2009-06-24 16:53:26          System: DA2F
ADAX61 00226 2009-06-24 16:53:26          Job Name: USACHPD2
ADAX61 00226 2009-06-24 16:53:26 Flags 1/2/3: D7/00/00
ADAN41 00226 2009-06-24 16:53:26 Function completed
```

Flags 1, 2, and 3 in this report are hexadecimal values that provide the following information about each nucleus:



Flag	Provides
1	<p>The cluster member service summary, as a combination of one or more of the following values:</p> <ul style="list-style-type: none"> <li>● X'80' – All services are active</li> <li>● X'40' – Work data set is needed for recovery</li> <li>● X'10' – Accepting and processing intracluster commands</li> <li>● X'04' – Cache services are available</li> <li>● X'02' – Lock services are available</li> <li>● X'01' – Messaging services are available</li> </ul> <p>For example, a value of 97 for Flag 1 indicates that all services are active (X'80'), the nucleus is accepting and processing intracluster commands (X'10'), and cache (X'04'), lock (X'02') and messaging (X'01') services are all available (80+10+4+2+1=97).</p>
2	<p>The cluster member failure status, as a combination of one or more of the following values:</p> <ul style="list-style-type: none"> <li>● X'80' – All services are down</li> <li>● X'40' – Canceled by this nucleus</li> <li>● X'10' – Abnormal termination of intracluster command processing occurred</li> <li>● X'04' – Abnormal exit from cache occurred</li> <li>● X'02' – Abnormal exit from lock occurred</li> <li>● X'01' – Abnormal exit from the XCF group (messaging) occurred</li> </ul>
3	<p>The cluster XCF status monitoring summary, as a combination of one or more of the following values:</p> <ul style="list-style-type: none"> <li>● X'80' – A system-level XCF status monitoring exception occurred.</li> <li>● X'40' – A member-level XCF status monitoring exception occurred.</li> <li>● X'02' – A warning message was issued for the system-level XCF status monitoring exception.</li> <li>● X'01' – A warning message was issued for the member-level XCF status monitoring exception.</li> </ul> <p>For example, a value of 41 for Flag 3 indicates that a member-level XCF status monitoring exception occurred (X'40') and that a warning message (X'01') was issued for it (40+1=41).</p>

## DNFV Command: Display Nucleus File Variables

DNFV

Use the DNFV command to display information about current file use.

This command provides information about the files in use at a particular point in time. It also indicates which other nucleus has exclusive file control if, for example, a user program receives a response 148 (ADARSP148), subcode 15.

Here is some sample output:

```
ADAI29 OPER CMD: DNFV
FNR=00008  A=Y U=Y ID=          CA=00000  CU=00001
```

where;

<i>FNR=nnnnn</i>	is the file number
<i>A={Y   N}</i>	(yes or no) indicates whether the file is used for access (read and/or search)
<i>U={Y   N}</i>	(yes or no) indicates whether the file is used for update. Use for update includes use for access.
<i>ID=nucid</i>	is the ID of the nucleus that owns the file lock, if the file is locked.
<i>CA=nnnnn</i>	is the number of users on this nucleus who are currently accessing this file.
<i>CU=nnnnn</i>	is the number of users on this nucleus who are currently updating this file.

## DPARM Command: Display Adabas Session Parameters

DPARM

Use the DPARM command to display the Adabas session parameters currently in effect. Here is an example:

```
ADAI29 Oper cmd: DPARM
ADAN16 00205 2011-11-09 12:14:12 LRPL=20971520
ADAN16 00205 2011-11-09 12:14:12 READONLY=NO, UTIONLY=NO
ADAN16 00205 2011-11-09 12:14:12 ASYTVS=YES, AOSLOG=NO
ADAN16 00205 2011-11-09 12:14:12 ASSOSPACEWARN=0
ADAN16 00205 2011-11-09 12:14:12 DATASPACEWARN=0
ADAN16 00205 2011-11-09 12:14:12 NC=500, NH=200, NT=50, NU=500
ADAN16 00205 2011-11-09 12:14:12 NPLOGBUFFERS=0
ADAN16 00205 2011-11-09 12:14:12 NWORK1BUFFERS=1
ADAN16 00205 2011-11-09 12:14:12 LBP=20974848, LFP=12000, LWP=10485760
ADAN16 00205 2011-11-09 12:14:12 LI=10000, LP=1500, LQ=10000, LS=4194304
ADAN16 00205 2011-11-09 12:14:12 LFIOP=5242880
ADAN16 00205 2011-11-09 12:14:12 LOGWARN=0, INDEXCROSSCHECK=YES
ADAN16 00205 2011-11-09 12:14:12 FMXIO=16, LU=70000, SECUID=REQUIRE
ADAN16 00205 2011-11-09 12:14:12 TT=900, TNAA=900, TNAE=900, CT=60
```

```

ADAN16 00205 2011-11-09 12:14:12 TNAX=900,MXTT=3600,MXTNA=3600
ADAN16 00205 2011-11-09 12:14:12 TLSCMD=300,MXTSX=3600
ADAN16 00205 2011-11-09 12:14:12 V64BIT=NO,LARGE PAGE=NO
ADAN16 00205 2011-11-09 12:14:12 NOLOG
ADAN16 00205 2011-11-09 12:14:12 LOGVOLIO=NO
ADAN16 00205 2011-11-09 12:14:12 SMF=NO
ADAN41 00205 2011-11-09 12:14:12 Function completed

```

Additional Adabas add-on products and nucleus components may display more parameters than are shown in this sample. For example, the DPARM command includes settings for the ADARUN parameters related to Adabas Cluster Services and Adabas Parallel Services alert and timeout statistics.

## DPPT Command: Display Parallel Participant Table (PPT)



Use the DPPT command to display the parallel participant table (PPT) block for a nucleus.

This command produces internal information for use by Software AG technical support.

### Sample Output

```

ADAI29 Oper cmd: DPPT
ADAN24 00199 2009-01-27 22:31:35 Display PPT RABNs 00000083 to 000000A2
ADAN24 00199 2009-01-27 22:31:35
ADAN24 00199 2009-01-27 22:31:35           PPT RABN: 00000083
ADAN24 00199 2009-01-27 22:31:35 Number of entries: 05
ADAN24 00199 2009-01-27 22:31:35 Nucleus indicator: E2
ADAN24 00199 2009-01-27 22:31:35           NUCID: 0000
ADAN24 00199 2009-01-27 22:31:35           Session number: 0005
ADAN24 00199 2009-01-27 22:31:35           Last PLOG block: 00000000
ADAN24 00199 2009-01-27 22:31:35           PLOG block ind: 00
ADAN24 00199 2009-01-27 22:31:35           PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35           Entry ID: E6
ADAN24 00199 2009-01-27 22:31:35 Dataset=/SAGUID/PLX2/V7/WORKR1/
ADAN24 00199 2009-01-27 22:31:35           PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35           Entry ID: 61
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/PLOGR1/
ADAN24 00199 2009-01-27 22:31:35           PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35           Entry ID: 62
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/PLOGR2/
ADAN24 00199 2009-01-27 22:31:35           PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35           Entry ID: 41
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/CLOGR1/
ADAN24 00199 2009-01-27 22:31:35           PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35           Entry ID: 42
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/CLOGR2/
ADAN41 00199 2009-01-27 22:31:35 Function completed

```

## DTARG Command: Display System Image



Use the DTARG command to display the system image currently servicing commands routed using the Entire Net-Work DBID target.

The Entire Net-Work DBID target is used to route commands from users on remote systems with no active PLXCB. Such systems may be part of the z/OS sysplex or other Entire Net-Work nodes outside the sysplex.

## DXCACHE Command: Display Cache Statistics

Use DXCACHE to display the primary cache-related statistics.

The full set of statistics shown in this output is displayed only for users who have the selectable unit Adabas Online System (AOS) installed.

If you have installed only the demo version of AOS delivered with Adabas, only the statistics in the sections Totals, Data Storage, and Normal Index are displayed using this command.

### Sample Output

```
ADAX61 00006 2000-09-06 19:29:23 External cache
statistics:
ADAX61 00006 2000-09-06 19:29:23
```

### Cast-out Directory

```
ADAX61 00006 2000-09-06 19:29:23 Cast-out dir      :      35
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :         0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :      35
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Unlock cast-out:      35
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :         1
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :      34
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Directory reads:         1
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :         0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :         1
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
```

### Totals

```
ADAX61 00006 2000-09-06 19:29:23 Totals:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads          :      1,681
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :         71
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :      1,610
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache      :      888
ADAX61 00006 2000-09-06 19:29:23 Not in cache  :      793
ADAX61 00006 2000-09-06 19:29:23 Structure full:         0

ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Writes        :     25,467
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :     22,724
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :      2,743
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Written       :     25,467
ADAX61 00006 2000-09-06 19:29:23 Not written   :         0
```

ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Validates :	65,552
ADAX61	00006	2000-09-06	19:29:23	Block invalid :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads :	1,727
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	265
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	1,462
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Deletes :	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts :	0
ADAX61	00006	2000-09-06	19:29:23		

### Address Converter

ADAX61	00006	2000-09-06	19:29:23	AC:	
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Reads :	11
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	11
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	In cache :	6
ADAX61	00006	2000-09-06	19:29:23	Not in cache :	5
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Writes :	2,644
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	2,608
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	36
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Written :	2,644
ADAX61	00006	2000-09-06	19:29:23	Not written :	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Validates :	8,772
ADAX61	00006	2000-09-06	19:29:23	Block invalid :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads :	38
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	38
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Deletes :	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts :	0
ADAX61	00006	2000-09-06	19:29:23		

### Data Storage

ADAX61	00006	2000-09-06	19:29:23	DS:	
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Reads :	1,609
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	1,609
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	In cache :	855
ADAX61	00006	2000-09-06	19:29:23	Not in cache :	754
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Writes :	2,645
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	0

```

ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 2,645
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Written : 2,645
ADAX61 00006 2000-09-06 19:29:23 Not written : 0
ADAX61 00006 2000-09-06 19:29:23 Structure full: 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Validates : 6,603
ADAX61 00006 2000-09-06 19:29:23 Block invalid : 0
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Cast-out reads : 1,461
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 1,461
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Deletes : 0
ADAX61 00006 2000-09-06 19:29:23 Timeouts : 0
ADAX61 00006 2000-09-06 19:29:23
    
```

**Data Storage Space Table**

```

ADAX61 00006 2000-09-06 19:29:23 DSST:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads : 1
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 1
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache : 0
ADAX61 00006 2000-09-06 19:29:23 Not in cache : 1
ADAX61 00006 2000-09-06 19:29:23 Structure full: 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Writes : 2,644
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 2,622
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 22
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Written : 2,644
ADAX61 00006 2000-09-06 19:29:23 Not written : 0
ADAX61 00006 2000-09-06 19:29:23 Structure full: 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Validates : 3,969
ADAX61 00006 2000-09-06 19:29:23 Block invalid : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Cast-out reads : 34
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 33
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 1
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Deletes : 0
ADAX61 00006 2000-09-06 19:29:23 Timeouts : 0
ADAX61 00006 2000-09-06 19:29:23
    
```

**File Control Block**

```

ADAX61 00006 2000-09-06 19:29:23 FCB:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Reads : 2
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 2
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache : 0
ADAX61 00006 2000-09-06 19:29:23 Not in cache : 2
    
```

ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Writes :	2,132
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	2,123
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	9
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Written :	2,132
ADAX61	00006	2000-09-06	19:29:23	Not written :	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Validates :	17,000
ADAX61	00006	2000-09-06	19:29:23	Block invalid :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads :	33
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	33
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Deletes :	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts :	0
ADAX61	00006	2000-09-06	19:29:23		

### Normal Index

ADAX61	00006	2000-09-06	19:29:23	NI:	
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Reads :	50
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	49
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	1
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	In cache :	25
ADAX61	00006	2000-09-06	19:29:23	Not in cache :	25
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Writes :	7,767
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	7,747
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	20
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Written :	7,767
ADAX61	00006	2000-09-06	19:29:23	Not written :	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Validates :	7,273
ADAX61	00006	2000-09-06	19:29:23	Block invalid :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads :	101
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	101
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Deletes :	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts :	0
ADAX61	00006	2000-09-06	19:29:23		

### Upper Index

ADAX61	00006	2000-09-06	19:29:23	UI:	
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Reads :	8
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	8
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	0

```

ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache      :          2
ADAX61 00006 2000-09-06 19:29:23 Not in cache :          6
ADAX61 00006 2000-09-06 19:29:23 Structure full:          0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Writes      :       7,635
ADAX61 00006 2000-09-06 19:29:23 Synchronous :       7,624
ADAX61 00006 2000-09-06 19:29:23 Asynchronous :          11
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Written     :       7,635
ADAX61 00006 2000-09-06 19:29:23 Not written :          0
ADAX61 00006 2000-09-06 19:29:23 Structure full:          0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Validates   :      21,935
ADAX61 00006 2000-09-06 19:29:23 Block invalid :          0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Cast-out reads :          60
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :          60
ADAX61 00006 2000-09-06 19:29:23 Asynchronous   :          0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Deletes      :          0
ADAX61 00006 2000-09-06 19:29:23 Timeouts    :          0
ADAX61 00006 2000-09-06 19:29:23

```

## File Statistics

```

ADAX61 00006 2000-09-06 19:29:23 File statistics for files with over 25
ADAX61 00006 2000-09-06 19:29:23 percent of the total cache statistics:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 File      1:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads     :          1,672
ADAX61 00006 2000-09-06 19:29:23 Writes    :          22,798
ADAX61 00006 2000-09-06 19:29:23 Validates :          61,531
ADAX61 00006 2000-09-06 19:29:23

```

## DXFILE Command: Display Cache Statistics for Files

Use DXFILE to display cache-related statistics for 1 to 5 files.

The command is specified using the following format:

```
DXFILE= fnr [, fnr1 ]...
```

## Sample Output

```

ADAI29 OPER CMD: DXFILE=0,1,2,3,9
ADAX61 00006 2000-09-06 19:30:38

```

### File 0

```

ADAX61 00006 2000-09-06 19:30:38 File      0:
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Reads     :          1
ADAX61 00006 2000-09-06 19:30:38 Synchronous :          1

```



```

ADAX61 00006 2000-09-06 19:30:38 Asynchronous : 0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 In cache : 0
ADAX61 00006 2000-09-06 19:30:38 Not in cache : 1
ADAX61 00006 2000-09-06 19:30:38 Structure full: 0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Writes : 2,644
ADAX61 00006 2000-09-06 19:30:38 Synchronous : 2,622
ADAX61 00006 2000-09-06 19:30:38 Asynchronous : 22
ADAX61 00006 2000-09-06 19:30:38

ADAX61 00006 2000-09-06 19:30:38 Written : 2,644
ADAX61 00006 2000-09-06 19:30:38 Not written : 0
ADAX61 00006 2000-09-06 19:30:38 Structure full: 0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Validates : 3,969
ADAX61 00006 2000-09-06 19:30:38 Block invalid : 0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Cast-out reads : 34
ADAX61 00006 2000-09-06 19:30:38 Synchronous : 33
ADAX61 00006 2000-09-06 19:30:38 Asynchronous : 1
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Deletes : 0
ADAX61 00006 2000-09-06 19:30:38 Timeouts : 0
ADAX61 00006 2000-09-06 19:30:38

```

**File 1**

```

ADAX61 00006 2000-09-06 19:30:38 File 1:
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Reads : 1,672
ADAX61 00006 2000-09-06 19:30:38 Synchronous : 64
ADAX61 00006 2000-09-06 19:30:38 Asynchronous : 1,608
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 In cache : 888
ADAX61 00006 2000-09-06 19:30:38 Not in cache : 784
ADAX61 00006 2000-09-06 19:30:38 Structure full: 0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Writes : 22,798
ADAX61 00006 2000-09-06 19:30:38 Synchronous : 20,082
ADAX61 00006 2000-09-06 19:30:38 Asynchronous : 2,716
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Written : 22,798
ADAX61 00006 2000-09-06 19:30:38 Not written : 0
ADAX61 00006 2000-09-06 19:30:38 Structure full: 0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Validates : 61,531
ADAX61 00006 2000-09-06 19:30:38 Block invalid : 0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Cast-out reads : 1,677
ADAX61 00006 2000-09-06 19:30:38 Synchronous : 221
ADAX61 00006 2000-09-06 19:30:38 Asynchronous : 1,456
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Deletes : 0
ADAX61 00006 2000-09-06 19:30:38 Timeouts : 0
ADAX61 00006 2000-09-06 19:30:38

```

**File 2**

```

ADAX61 00006 2000-09-06 19:30:38 File      2:
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Reads      :           0
ADAX61 00006 2000-09-06 19:30:38 Synchronous :           0
ADAX61 00006 2000-09-06 19:30:38 Asynchronous :           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 In cache   :           0
ADAX61 00006 2000-09-06 19:30:38 Not in cache :           0
ADAX61 00006 2000-09-06 19:30:38 Structure full:           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Writes     :           0
ADAX61 00006 2000-09-06 19:30:38 Synchronous :           0
ADAX61 00006 2000-09-06 19:30:38 Asynchronous :           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Written    :           0
ADAX61 00006 2000-09-06 19:30:38 Not written :           0
ADAX61 00006 2000-09-06 19:30:38 Structure full:           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Validates  :           0
ADAX61 00006 2000-09-06 19:30:38 Block invalid :           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Cast-out reads :           0
ADAX61 00006 2000-09-06 19:30:38 Synchronous :           0
ADAX61 00006 2000-09-06 19:30:38 Asynchronous :           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Deletes    :           0
ADAX61 00006 2000-09-06 19:30:38 Timeouts   :           0
ADAX61 00006 2000-09-06 19:30:38

```

**File 3**

```

ADAX61 00006 2000-09-06 19:30:38 File      3:
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Reads      :           0
ADAX61 00006 2000-09-06 19:30:38 Synchronous :           0
ADAX61 00006 2000-09-06 19:30:38 Asynchronous :           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 In cache   :           0
ADAX61 00006 2000-09-06 19:30:38 Not in cache :           0
ADAX61 00006 2000-09-06 19:30:38 Structure full:           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Writes     :           0
ADAX61 00006 2000-09-06 19:30:38 Synchronous :           0
ADAX61 00006 2000-09-06 19:30:38 Asynchronous :           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Written    :           0
ADAX61 00006 2000-09-06 19:30:38 Not written :           0
ADAX61 00006 2000-09-06 19:30:38 Structure full:           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Validates  :           0
ADAX61 00006 2000-09-06 19:30:38 Block invalid :           0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Cast-out reads :           0
ADAX61 00006 2000-09-06 19:30:38 Synchronous :           0
ADAX61 00006 2000-09-06 19:30:38 Asynchronous :           0
ADAX61 00006 2000-09-06 19:30:38

```

```

ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Deletes          :          0
ADAX61 00006 2000-09-06 19:30:38 Timeouts      :          0
ADAX61 00006 2000-09-06 19:30:38

```

## File 9

```

ADAX61 00006 2000-09-06 19:30:38 File          9:
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Reads         :          8
ADAX61 00006 2000-09-06 19:30:38 Synchronous   :          6
ADAX61 00006 2000-09-06 19:30:38 Asynchronous  :          2
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 In cache      :          0
ADAX61 00006 2000-09-06 19:30:38 Not in cache  :          8
ADAX61 00006 2000-09-06 19:30:38 Structure full:          0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Writes        :         25
ADAX61 00006 2000-09-06 19:30:38 Synchronous   :         20
ADAX61 00006 2000-09-06 19:30:38 Asynchronous  :          5
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Written       :         25
ADAX61 00006 2000-09-06 19:30:38 Not written   :          0
ADAX61 00006 2000-09-06 19:30:38 Structure full:          0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Validates     :         52
ADAX61 00006 2000-09-06 19:30:38 Block invalid :          0
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Cast-out reads :         16
ADAX61 00006 2000-09-06 19:30:38 Synchronous   :         11
ADAX61 00006 2000-09-06 19:30:38 Asynchronous  :          5
ADAX61 00006 2000-09-06 19:30:38
ADAX61 00006 2000-09-06 19:30:38 Deletes       :          0
ADAX61 00006 2000-09-06 19:30:38 Timeouts      :          0
ADAN41 00006 2000-09-06 19:30:38 Function completed

```

## DXLOCK Command: Display Lock Statistics

Use DXLOCK to display lock-related statistics.

### Sample Output

```

ADAX61 00006 2000-09-06 19:29:23 External lock statistics:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

### General Control Block Lock

```

ADAX61 00006 2000-09-06 19:29:23 1. GCB lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :          0
ADAX61 00006 2000-09-06 19:29:23                          Granted      :          0
ADAX61 00006 2000-09-06 19:29:23                          Rejected    :          0
ADAX61 00006 2000-09-06 19:29:23 Unconditional             :          0
ADAX61 00006 2000-09-06 19:29:23 Synchronous               :          0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous              :          0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :          0

```

```
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
```

**Security Lock**

```
ADAX61 00006 2000-09-06 19:29:23 2. Security lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional : 0
ADAX61 00006 2000-09-06 19:29:23 Granted : 0
ADAX61 00006 2000-09-06 19:29:23 Rejected : 0
ADAX61 00006 2000-09-06 19:29:23 Unconditional : 0
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued : 0
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
```

**FST Lock**

```
ADAX61 00006 2000-09-06 19:29:23 3. FST lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional : 0
ADAX61 00006 2000-09-06 19:29:23 Granted : 0
ADAX61 00006 2000-09-06 19:29:23 Rejected : 0
ADAX61 00006 2000-09-06 19:29:23 Unconditional : 0
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued : 0
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
```

**File Lock Table Lock**

```
ADAX61 00006 2000-09-06 19:29:23 4. File-lock-table lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional : 0
ADAX61 00006 2000-09-06 19:29:23 Granted : 0
ADAX61 00006 2000-09-06 19:29:23 Rejected : 0
ADAX61 00006 2000-09-06 19:29:23 Unconditional : 0
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued : 0
ADAX61 00006 2000-09-06 19:29:23 Synchronous : 0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous : 0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
```

**Online Save Lock**

```

ADAX61 00006 2000-09-06 19:29:23 5. Online save lock
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23                      Granted      :      0
ADAX61 00006 2000-09-06 19:29:23                      Rejected     :      0
ADAX61 00006 2000-09-06 19:29:23                      Unconditional :      0
ADAX61 00006 2000-09-06 19:29:23                      Synchronous  :      0
ADAX61 00006 2000-09-06 19:29:23                      Asynchronous :      0
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Releases - Issued      :      0
ADAX61 00006 2000-09-06 19:29:23                      Synchronous  :      0
ADAX61 00006 2000-09-06 19:29:23                      Asynchronous :      0
ADAX61 00006 2000-09-06 19:29:23

```

**Buffer Flush Lock**

```

ADAX61 00006 2000-09-06 19:29:23 6. Buffer flush lock
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23                      Granted      :      0
ADAX61 00006 2000-09-06 19:29:23                      Rejected     :      0
ADAX61 00006 2000-09-06 19:29:23                      Unconditional :     38
ADAX61 00006 2000-09-06 19:29:23                      Synchronous  :     38
ADAX61 00006 2000-09-06 19:29:23                      Asynchronous :      0
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Releases - Issued      :     38
ADAX61 00006 2000-09-06 19:29:23                      Synchronous  :     38
ADAX61 00006 2000-09-06 19:29:23                      Asynchronous :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

**Global ET Sync Lock**

```

ADAX61 00006 2000-09-06 19:29:23 7. Global ET sync lock
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23                      Granted      :      0
ADAX61 00006 2000-09-06 19:29:23                      Rejected     :      0
ADAX61 00006 2000-09-06 19:29:23                      Unconditional :      0
ADAX61 00006 2000-09-06 19:29:23                      Synchronous  :      0
ADAX61 00006 2000-09-06 19:29:23                      Asynchronous :      0
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Releases - Issued      :      0
ADAX61 00006 2000-09-06 19:29:23                      Synchronous  :      0
ADAX61 00006 2000-09-06 19:29:23                      Asynchronous :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

**Recovery Lock**

```

ADAX61 00006 2000-09-06 19:29:23 8. Recovery lock
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23                      Granted      :      0
ADAX61 00006 2000-09-06 19:29:23                      Rejected     :      0

```

ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			

**Hold ISN Locks**

ADAX61	00006	2000-09-06	19:29:23	9. Hold ISN locks		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	3100
ADAX61	00006	2000-09-06	19:29:23	Granted	:	3100
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	3100
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	3100
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	3100
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			

**Unique Descriptor Locks**

ADAX61	00006	2000-09-06	19:29:23	10. Unique descriptor locks		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	1
ADAX61	00006	2000-09-06	19:29:23	Granted	:	1
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	1
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	1
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	1
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			

**ETID Locks**

ADAX61	00006	2000-09-06	19:29:23	11. ETID locks		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	1
ADAX61	00006	2000-09-06	19:29:23	Granted	:	1
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	1
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			

**New Data RABN Locks**

```

ADAX61 00006 2000-09-06 19:29:23 12. New-Data-RABN locks
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional       :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous         :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous          :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous         :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous          :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

**Checkpoint Lock**

```

ADAX61 00006 2000-09-06 19:29:23 13. Checkpoint lock
ADAX61 00006 2000-09-06 19:29:23

ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional       :      6
ADAX61 00006 2000-09-06 19:29:23           Synchronous         :      6
ADAX61 00006 2000-09-06 19:29:23           Asynchronous          :      0

ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :      6
ADAX61 00006 2000-09-06 19:29:23           Synchronous         :      6
ADAX61 00006 2000-09-06 19:29:23           Asynchronous          :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

**ET Data Lock**

```

ADAX61 00006 2000-09-06 19:29:23 14. ET data lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional       :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous         :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous          :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous         :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous          :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

**Global Update Command Sync Lock**

```

ADAX61 00006 2000-09-06 19:29:23 15. Global update command sync lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional       :      33
ADAX61 00006 2000-09-06 19:29:23           Synchronous         :      33

```

```

ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           33
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           33
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

### Parameter Lock

```

ADAX61 00006 2000-09-06 19:29:23 16. Parameter lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional   :           0
ADAX61 00006 2000-09-06 19:29:23           Granted               :           0
ADAX61 00006 2000-09-06 19:29:23           Rejected               :           0
ADAX61 00006 2000-09-06 19:29:23           Unconditional          :           0
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           0
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAN41 00006 2000-09-06 19:29:23 Function completed

```

### DBID Target Assignment Lock

```

ADAX61 00006 2000-09-06 19:29:23 17.DBID target assignment lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional   :           0
ADAX61 00006 2000-09-06 19:29:23           Granted               :           0
ADAX61 00006 2000-09-06 19:29:23           Rejected               :           0
ADAX61 00006 2000-09-06 19:29:23           Unconditional          :           2
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           2
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           2
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           2
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAN41 00006 2000-09-06 19:29:23 Function completed

```

## DXMSG Command: Display Messaging Performance Statistics

The DXMSG command can be used to display the messaging performance statistics available for Adabas Cluster Services.

The statistics produced by the DXMSG command can be used to determine the impact of messaging on system performance and to determine how to set the ADARUN MXMSG parameter related to the other alert and timeout enhancements in Adabas Cluster Services.

### Sample Output

```

17:28:45 ADAI29 Oper cmd: DXMSG
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Messaging statistics
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Message Control Block statistics
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Allocated                224

```



```

17:28:45 ADAX16 00226 2007-06-01 17:28:44 Used 2
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Total requests 1,567
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Statistics for ACMD-type messages
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Messages sent 771
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Messages arrived 796
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Messages accepted 796
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Replies sent 794
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Statistics for XCF transport service
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Messages subject to MXMSG
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Message duration in seconds
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Minimum 0.000021
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Maximum 0.050979
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Mean 0.004110
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Std Dev 0.004507
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Message count 686
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1000 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 10 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 ms 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 10 ms 8% 56
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1 ms 81% 553
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 us 11% 74
17:28:45 ADAX16 00226 2007-06-01 17:28:44 <= 100 us 0% 3
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Messages not subject to MXMSG
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Message duration in seconds
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Minimum 0.000938
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Maximum 0.047989
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Mean 0.010455
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Std Dev 0.009466
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Message count 83
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1000 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 10 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 ms 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 10 ms 37% 31
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1 ms 61% 51
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 us 1% 1
17:28:45 ADAX16 00226 2007-06-01 17:28:44 <= 100 us 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Total for all messages
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Message duration in seconds
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Minimum 0.000021
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Maximum 0.050979
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Mean 0.004795
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Std Dev 0.003194
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAX16 00226 2007-06-01 17:28:44 Message count 769
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1000 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 10 s 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1 s 0% 0

```

```

17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 ms 0% 0
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 10 ms 11% 87
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 1 ms 79% 604
17:28:45 ADAX16 00226 2007-06-01 17:28:44 > 100 us 10% 75
17:28:45 ADAX16 00226 2007-06-01 17:28:44 <= 100 us 0% 3
17:28:45 ADAX16 00226 2007-06-01 17:28:44
17:28:45 ADAN41 00226 2007-06-01 17:28:44 Function completed

```

The performance statistics are split into those that are subject to the ADARUN MXMSG parameter setting and those that are not; after each is reported separately in the output, a combined report is provided containing the summarization of the two for all messages.

In the DXMSG output, "Mean" refers to the average message duration (arithmetic mean of all the messages measured) and "Std Dev" refers to the related standard deviation (average deviation from the mean). The unit symbols used in the statistics are "s" for seconds, "ms" for milliseconds, and "us" for microseconds.

## DXSTAT Command: Display Cache and Lock Statistics

Use DXSTAT to display all cache- and lock-related statistics.

The full set of external cache statistics shown in this output is displayed only for users who have the selectable unit Adabas Online System (AOS) installed.

If you have installed only the demo version of AOS delivered with Adabas, only the external cache statistics in the sections Totals, Data Storage, and Normal Index are displayed using this command. All file cache statistics for files and all external lock statistics are displayed.

### Sample Output

```
ADAI29 OPER CMD: DXSTAT
```

#### External Cache Statistics

```

ADAX61 00006 2000-09-06 19:29:23 External cache statistics:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Cast-out dir      :          35
ADAX61 00006 2000-09-06 19:29:23 Synchronous    :           0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous   :          35
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Unlock cast-out:          35
ADAX61 00006 2000-09-06 19:29:23 Synchronous    :           1
ADAX61 00006 2000-09-06 19:29:23 Asynchronous   :          34
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Directory reads:           1
ADAX61 00006 2000-09-06 19:29:23 Synchronous    :           0
ADAX61 00006 2000-09-06 19:29:23 Asynchronous   :           1
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Totals:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads          :        1,681
ADAX61 00006 2000-09-06 19:29:23 Synchronous    :           71
ADAX61 00006 2000-09-06 19:29:23 Asynchronous   :        1,610
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache       :          888
ADAX61 00006 2000-09-06 19:29:23 Not in cache   :          793

```

ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Writes :	25,467
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	22,724
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	2,743
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Written :	25,467
ADAX61	00006	2000-09-06	19:29:23	Not written :	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Validates :	65,552
ADAX61	00006	2000-09-06	19:29:23	Block invalid :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads :	1,727
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	265
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	1,462
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Deletes :	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	AC:	
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Reads :	11
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	11
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	In cache :	6
ADAX61	00006	2000-09-06	19:29:23	Not in cache :	5
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Writes :	2,644
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	2,608
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	36
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Written :	2,644
ADAX61	00006	2000-09-06	19:29:23	Not written :	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Validates :	8,772
ADAX61	00006	2000-09-06	19:29:23	Block invalid :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads :	38
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	38
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Deletes :	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts :	0
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	DS:	
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	Reads :	1,609
ADAX61	00006	2000-09-06	19:29:23	Synchronous :	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous :	1,609
ADAX61	00006	2000-09-06	19:29:23		
ADAX61	00006	2000-09-06	19:29:23	In cache :	855
ADAX61	00006	2000-09-06	19:29:23	Not in cache :	754
ADAX61	00006	2000-09-06	19:29:23	Structure full:	0
ADAX61	00006	2000-09-06	19:29:23		

ADAX61	00006	2000-09-06	19:29:23	Writes	:	2,645
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	2,645
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Written	:	2,645
ADAX61	00006	2000-09-06	19:29:23	Not written	:	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Validates	:	6,603
ADAX61	00006	2000-09-06	19:29:23	Block invalid	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads	:	1,461
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	1,461
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Deletes	:	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	DSST:		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Reads	:	1
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	1
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	In cache	:	0
ADAX61	00006	2000-09-06	19:29:23	Not in cache	:	1
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Writes	:	2,644
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	2,622
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	22
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Written	:	2,644
ADAX61	00006	2000-09-06	19:29:23	Not written	:	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Validates	:	3,969
ADAX61	00006	2000-09-06	19:29:23	Block invalid	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads	:	34
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	33
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	1
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Deletes	:	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	FCB:		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Reads	:	2
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	2
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	In cache	:	0
ADAX61	00006	2000-09-06	19:29:23	Not in cache	:	2
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Writes	:	2,132
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	2,123

ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	9
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Written	:	2,132
ADAX61	00006	2000-09-06	19:29:23	Not written	:	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Validates	:	17,000
ADAX61	00006	2000-09-06	19:29:23	Block invalid	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads	:	33
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	33
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Deletes	:	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	NI:		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Reads	:	50
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	49
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	1
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	In cache	:	25
ADAX61	00006	2000-09-06	19:29:23	Not in cache	:	25
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Writes	:	7,767
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	7,747
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	20
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Written	:	7,767
ADAX61	00006	2000-09-06	19:29:23	Not written	:	0
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Validates	:	7,273
ADAX61	00006	2000-09-06	19:29:23	Block invalid	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Cast-out reads	:	101
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	101
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Deletes	:	0
ADAX61	00006	2000-09-06	19:29:23	Timeouts	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	UI:		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Reads	:	8
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	8
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	In cache	:	2
ADAX61	00006	2000-09-06	19:29:23	Not in cache	:	6
ADAX61	00006	2000-09-06	19:29:23	Structure full:		0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Writes	:	7,635
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	7,624
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	11
ADAX61	00006	2000-09-06	19:29:23			

```

ADAX61 00006 2000-09-06 19:29:23 Written      :           7,635
ADAX61 00006 2000-09-06 19:29:23 Not written :           0
ADAX61 00006 2000-09-06 19:29:23 Structure full:           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Validates   :          21,935
ADAX61 00006 2000-09-06 19:29:23 Block invalid :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Cast-out reads :           60
ADAX61 00006 2000-09-06 19:29:23 Synchronous  :           60
ADAX61 00006 2000-09-06 19:29:23 Asynchronous :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Deletes     :           0
ADAX61 00006 2000-09-06 19:29:23 Timeouts    :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 File statistics for files with over 25
ADAX61 00006 2000-09-06 19:29:23 percent of the total cache statistics:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 File      1:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads      :          1,672
ADAX61 00006 2000-09-06 19:29:23 Writes     :          22,798
ADAX61 00006 2000-09-06 19:29:23 Validates  :          61,531
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23

```

**File Cache Statistics for Files**

```

ADAX61 00006 2000-09-06 19:29:23 File      0:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads     :           1
ADAX61 00006 2000-09-06 19:29:23 Synchronous :           1
ADAX61 00006 2000-09-06 19:29:23 Asynchronous :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache   :           0
ADAX61 00006 2000-09-06 19:29:23 Not in cache :           1
ADAX61 00006 2000-09-06 19:29:23 Structure full:           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Writes     :          2,644
ADAX61 00006 2000-09-06 19:29:23 Synchronous :          2,622
ADAX61 00006 2000-09-06 19:29:23 Asynchronous :           22
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Written    :          2,644
ADAX61 00006 2000-09-06 19:29:23 Not written :           0
ADAX61 00006 2000-09-06 19:29:23 Structure full:           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Validates  :          3,969
ADAX61 00006 2000-09-06 19:29:23 Block invalid :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Cast-out reads :           34
ADAX61 00006 2000-09-06 19:29:23 Synchronous :           33
ADAX61 00006 2000-09-06 19:29:23 Asynchronous :           1
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Deletes    :           0
ADAX61 00006 2000-09-06 19:29:23 Timeouts   :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 File      1:
ADAX61 00006 2000-09-06 19:29:23

```

```

ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads          :          1,672
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :             64
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :         1,608
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache      :             888
ADAX61 00006 2000-09-06 19:29:23 Not in cache  :             784
ADAX61 00006 2000-09-06 19:29:23 Structure full:              0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Writes        :         22,798
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :         20,082
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :           2,716
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Written       :         22,798
ADAX61 00006 2000-09-06 19:29:23 Not written   :              0
ADAX61 00006 2000-09-06 19:29:23 Structure full:              0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Validates     :         61,531
ADAX61 00006 2000-09-06 19:29:23 Block invalid :              0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Cast-out reads :          1,677
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :             221
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :         1,456
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Deletes       :              0
ADAX61 00006 2000-09-06 19:29:23 Timeouts     :              0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 File         9:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Reads          :              8
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :              6
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :              2
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 In cache      :              0
ADAX61 00006 2000-09-06 19:29:23 Not in cache  :              8
ADAX61 00006 2000-09-06 19:29:23 Structure full:              0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Writes        :              25
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :              20
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :              5
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Written       :              25
ADAX61 00006 2000-09-06 19:29:23 Not written   :              0
ADAX61 00006 2000-09-06 19:29:23 Structure full:              0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Validates     :              52
ADAX61 00006 2000-09-06 19:29:23 Block invalid :              0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Cast-out reads :              16
ADAX61 00006 2000-09-06 19:29:23 Synchronous   :              11
ADAX61 00006 2000-09-06 19:29:23 Asynchronous  :              5
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Deletes       :              0
ADAX61 00006 2000-09-06 19:29:23 Timeouts     :              0

```

**External Lock Statistics**

```

ADAX61 00006 2000-09-06 19:29:23 External lock statistics:
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 1. GCB lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 2. Security lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 3. FST lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 4. File-lock-table lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued         :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous        :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous         :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 5. Online save lock

```



ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Granted	:	0
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	6. Buffer flush lock		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Granted	:	0
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	38
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	38
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	38
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	38
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	7. Global ET sync lock		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Granted	:	0
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	8. Recovery lock		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Granted	:	0
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Releases - Issued	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	0
ADAX61	00006	2000-09-06	19:29:23	Asynchronous	:	0
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	9. Hold ISN locks		
ADAX61	00006	2000-09-06	19:29:23			
ADAX61	00006	2000-09-06	19:29:23	Obtains - Conditional	:	3100
ADAX61	00006	2000-09-06	19:29:23	Granted	:	3100
ADAX61	00006	2000-09-06	19:29:23	Rejected	:	0
ADAX61	00006	2000-09-06	19:29:23	Unconditional	:	0
ADAX61	00006	2000-09-06	19:29:23	Synchronous	:	3100

```

ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           3100
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           3100
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 10. Unique descriptor locks
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional   :           1
ADAX61 00006 2000-09-06 19:29:23           Granted              :           1
ADAX61 00006 2000-09-06 19:29:23           Rejected              :           0
ADAX61 00006 2000-09-06 19:29:23           Unconditional         :           0
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           1
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           1
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           1
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 11. ETID locks
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional   :           1
ADAX61 00006 2000-09-06 19:29:23           Granted              :           1
ADAX61 00006 2000-09-06 19:29:23           Rejected              :           0
ADAX61 00006 2000-09-06 19:29:23           Unconditional         :           0
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           1
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           0
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 12. New-Data-RABN locks
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional   :           0
ADAX61 00006 2000-09-06 19:29:23           Granted              :           0
ADAX61 00006 2000-09-06 19:29:23           Rejected              :           0
ADAX61 00006 2000-09-06 19:29:23           Unconditional         :           0
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           0
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 13. Checkpoint lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional   :           0
ADAX61 00006 2000-09-06 19:29:23           Granted              :           0
ADAX61 00006 2000-09-06 19:29:23           Rejected              :           0
ADAX61 00006 2000-09-06 19:29:23           Unconditional         :           6
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           6
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued       :           6
ADAX61 00006 2000-09-06 19:29:23           Synchronous           :           6
ADAX61 00006 2000-09-06 19:29:23           Asynchronous           :           0
ADAX61 00006 2000-09-06 19:29:23

```

```

ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 14. ET data lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous       :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous        :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued        :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous       :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous        :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 15. Global update command sync loc
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional      :     33
ADAX61 00006 2000-09-06 19:29:23           Synchronous       :     33
ADAX61 00006 2000-09-06 19:29:23           Asynchronous        :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued        :     33
ADAX61 00006 2000-09-06 19:29:23           Synchronous       :     33
ADAX61 00006 2000-09-06 19:29:23           Asynchronous        :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 16. Parameter lock
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Obtains - Conditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Granted          :      0
ADAX61 00006 2000-09-06 19:29:23           Rejected          :      0
ADAX61 00006 2000-09-06 19:29:23           Unconditional      :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous       :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous        :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23 Releases - Issued        :      0
ADAX61 00006 2000-09-06 19:29:23           Synchronous       :      0
ADAX61 00006 2000-09-06 19:29:23           Asynchronous        :      0
ADAX61 00006 2000-09-06 19:29:23
ADAX61 00006 2000-09-06 19:29:23
ADAN41 00006 2000-09-06 19:29:23 Function completed

```

## MXCANCEL Command: Dynamically Change MXCANCEL Parameter Setting

The MXCANCEL command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXCANCEL ADARUN parameter for a nucleus. This command can be used to specify the maximum number of seconds for which one cluster nucleus waits for the termination of another nucleus in the cluster that it has canceled for not responding to an internal, intracuster command. Valid values range from 15 through 2,147,483,647.

If the new MXCANCEL value is less than or equal to the current MXCANCELWARN setting, the MXCANCELWARN setting is automatically set to zero (0). (You can then use the MXCANCELWARN command to dynamically set the MXCANCELWARN setting appropriately.)

For more information about the MXCANCEL setting for a nucleus, read about the ADARUN MXCANCEL parameter in *MXCANCEL: Timeout Threshold for Canceled Peer Nucleus*.

## **MXCANCELWARN Command: Dynamically Change MXCANCELWARN Parameter Setting**

The MXCANCELWARN command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXCANCELWARN ADARUN parameter for a nucleus. This command can be used to specify the number of seconds after an intracluster cancellation request is made when the cluster nucleus requesting the cancellation should issue warnings about the inability of the canceled peer nucleus to terminate. Valid values range from 4 through 2,147,483, 647 or zero (0).

The value of the MXCANCELWARN setting must be less than the value of the MXCANCEL setting. If MXCANCELWARN is set to a value greater than or equal to the value specified for MXCANCEL, the value is rejected. If MXCANCELWARN is set to zero, no warnings are issued about canceled cluster nuclei that are slow to terminate.

For more information about the MXCANCELWARN setting for a nucleus, read about the ADARUN MXCANCELWARN parameter in *MXCANCELWARN : Timeout Threshold for Canceled Peer Nucleus Warning*.

## **MXMSG Command: Dynamically Change MXMSG Parameter Setting**

The MXMSG command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXMSG ADARUN parameter for a nucleus. This command can be used to specify the maximum number of seconds in which one cluster nucleus waits for the response of another nucleus in the cluster to an internal, intracluster command. Valid values range from 15 through 32,767.

If the new MXMSG value is less than or equal to the current MXMSGWARN setting, the MXMSGWARN setting is automatically set to zero (0). (You can then use the MXMSGWARN command to dynamically set the MXMSGWARN setting appropriately.)

For more information about the MXMSG setting for a nucleus, read about the ADARUN MXMSG parameter in *MXMSG: Timeout Threshold for Internucleus Command Processing*.

## **MXMSGWARN Command: Dynamically Change MXMSGWARN Parameter Setting**

The MXMSGWARN command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXMSGWARN ADARUN parameter for a nucleus. This command can be used to specify the number of seconds after an intracluster request is made when the cluster nucleus issuing the intracluster request should issue warnings about the failure of the target cluster nucleus to respond. Valid values range from 4 through 32,767 or zero (0).

The value of MXMSGWARN must be less than the value of MXMSG. If MXMSGWARN is set to a value greater than or equal to the value specified for MXMSG, the value is rejected. If MXMSGWARN is set to zero, no warnings are issued about cluster nuclei that are slow to respond.

For more information about the MXMSGWARN setting for a nucleus, read about the ADARUN MXMSGWARN parameter in *MXMSGWARN : Timeout Threshold for Internucleus Command Processing Warning*.

## MXSTATUS Command: Dynamically Change MXSTATUS Parameter Setting

The MXSTATUS command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXSTATUS ADARUN parameter for a nucleus. This command can be used to specify the number of seconds between member-level XCF status monitoring heartbeats. Valid values range from 15 through 21,474,836.

### Note:

The MXSTATUS command is only used for Adabas Cluster Services and not for Adabas Parallel Services. Adabas Parallel Services does not use XCF and ignores the setting.

The MXSTATUS command can only be used to change the value of the MXSTATUS parameter if the MXSTATUS parameter is not zero (0). This command cannot be used to turn status monitoring on (by specifying a nonzero value if the ADARUN MXSTATUS setting is zero) or to turn it off (by specifying a value of zero when the ADARUN MXSTATUS setting is nonzero). However, setting MXSTATUS to a very high value is effectively the same as turning status monitoring off (monitoring will occur very infrequently at least).

For more information about the MXSTATUS setting for a nucleus, read about the ADARUN MXSTATUS parameter in *MXSTATUS : Member-Level XCF Status Monitoring Heartbeat Interval*.

## MXWTOR Command: Dynamically Change MXWTOR Parameter Setting

The optional MXWTOR command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXWTOR ADARUN parameter for a nucleus. This command can be used to specify the maximum number of seconds that a cluster nucleus should wait for an operator response to a self-terminating operator query. Valid values range from 15 through 64,800 or zero (0).

If MXWTOR is set to zero, the operator query does not occur (no ADAX9J messages are written) and no operator intervention is expected.

For more information about the MXWTOR setting for a nucleus, read about the ADARUN MXWTOR parameter in *MXWTOR : Self-Termination Operator Query Interval*.

## SMFDETAIL Command: Select the Detail Section Types in SMF Interval and Termination Records

```
SMFDETAIL = { ALL | NONE | section-name-list }
```

Adabas SMF records can contain a variable set of detail sections in Interval and Termination records (subtypes 2 and 3). This command allows you to override the setting of the SMFDETAIL ADARUN parameter defined for this Adabas session. Using this command you can select the detail section types in Interval and Termination records that should be included in the Adabas SMF records. Unlike the SMFDETAIL ADARUN parameter, the value or values you specify for the SMFDETAIL command do *not* need to be enclosed in parentheses. If you specify NONE or ALL, they should be specified alone. However, you can specify one or more of the other detail section names (CMD, CSHB, CSHF, CSHG, CSHP, FILE, IODD, LOCK, MSGB, MSGC, MSGH, PARM, STG, THRD, or USER) in one SMFDETAIL parameter, separating each value with a comma.

The following table describes the meaning of the possible detail section names that can be used in the SMFDETAIL command:

<b>Detail Section Name</b>	<b>Description</b>
ALL	Generate all possible detail sections in the Adabas SMF records. If this value is specified, no others can be specified on the SMFDETAIL parameter.
CMD	Generate Adabas command activity detail sections in the Adabas SMF records.
CSHB <sup>1</sup>	Generate global cache activity by block detail sections in the Adabas SMF records.
CSHF <sup>1</sup>	Generate global cache activity by Adabas file number detail sections in the Adabas SMF records.
CSHG <sup>1</sup>	Generate global cache activity detail sections in the Adabas SMF records.
CSHP <sup>2</sup>	Generate Adabas Parallel Services cache activity detail sections in the Adabas SMF records.
FILE	Generate Adabas file activity detail sections in the Adabas SMF records.
IODD	Generate I/O activity by DD statement detail sections in the Adabas SMF records.
LOCK <sup>1</sup>	Generate global lock activity detail sections in the Adabas SMF records.
MSGB <sup>1</sup>	Generate internucleus messaging control block activity detail sections in the Adabas SMF records.
MSGC <sup>1</sup>	Generate internucleus messaging count detail sections in the Adabas SMF records.
MSGH <sup>1</sup>	Generate internucleus messaging service time histogram detail sections in the Adabas SMF records.
NONE	Generate no detail sections in the Adabas SMF records. If this value is specified, no others can be specified on the SMFDETAIL parameter.
PARM	Generate ADARUN parameter value detail sections in the Adabas SMF records.
STG	Generate Adabas storage pool detail sections in the Adabas SMF records.
THRD	Generate thread activity detail sections in the Adabas SMF records.

Detail Section Name	Description
USER	Generate user-defined details sections in the Adabas SMF records. If USER is specified, a value for the UEXSMF parameter should also be specified to identify the user exit to be invoked to generate the user-defined detail section.
<sup>1</sup> Available only in cluster environments (Adabas Cluster Services or Adabas Parallel Services must be installed).	
<sup>2</sup> Available only in cluster environments with Adabas Parallel Services installed.	

## TARGET Command: Route Commands to Specified Target

```
TARGET = { * | nucid | sysname }
```

Use this command to specify the system on which the Entire Net-Work DBID target for the Adabas Cluster Services or Adabas Parallel Services database is to be established. Specify a system name or the NUCID of a cluster nucleus on that system. The DBID target can be established on any system where a nucleus of the cluster is active. It is used to route commands from users on remote systems with no active PLXCB. Such systems may be part of the z/OS sysplex or other Entire Net-Work nodes outside the sysplex.

The command instructs Entire Net-Work to route requests to an Entire Net-Work node on an implicitly or explicitly specified system image. All future commands will be routed to the new destination. If there are existing users who have been routed using the DBID target and the target is relocated to another Entire Net-Work node, they will be reassigned to any cluster nuclei on the new node. These users lose their existing sessions with their previously assigned nuclei. As a consequence, they may receive response code 9 (ADARSP009) on the first command after the target is moved. Furthermore, they may receive response code 21 (ADARSP021) if they attempt to reuse previously defined command IDs (logical read sequences or search results). Note that all Adabas Parallel Services nuclei run only on a single Entire Net-Work node.

Several possible operands can be used to specify the desired DBID target assignment, as described in the following table.

Operand	Description
*	Specify an asterisk (*) to assign the DBID target to the Entire Net-Work node associated with the nucleus receiving the command.
<i>nucid</i>	Specify the nucleus ID (as defined in the ADARUN NUCID parameter) of an active cluster nucleus to assign the DBID target to the Entire Net-Work node associated with that nucleus.
<i>sysname</i>	Specify a system name (LPAR name) to assign the DBID target to the Entire Net-Work node associated with an active cluster nucleus on that system.

**Note:**

The DBID target identifies an Entire Net-Work node, not a specific nucleus on a system. The DBID target is jointly serviced by all nuclei on that Entire Net-Work node.